see how they are curled over, backwards and forwards, to give the greatest quantity of support, with the least expenditure of material, over the greatest external surface. Look at the more graceful fossil ammonite, and consider the enriched markings of its air chambers, varied to every form of section, and then say if man has not much to forget, and more to learn in his structural arrangements. The bee has constructed, age after age, and in all countries where it can exist, the same perfect hexagon, which is proved to be the best form for economising space, and giving strength with the least expenditure of material.

Used with iron, wrought and cast, hollow bricks may be combined for purposes where, at present, wood alone is introduced. Palaces and churches may own their adoption with singular advantage. In hospitals, gaols, workhouses, and asylums they will give ready means for a general diffusion of warmth and ventilation; barracks in tropical climates, so constructed, with hollow walls, would resist the intense action of the sun, and the solid material of the tile the attacks of insects, and, what is almost of as much consequence, their carriage would be about one-third that of solid bricks. Factories and warehouses would be made fireproof at the least cost, as much weight in the floors would be avoided. Museums and picture galleries would be freed from damp and rot, to the preservation of the wonders of nature and the glories of art; the dwelling-houses of the wealthy may have, in every room, a completeness of ventilation at present unattainable with solid bricks. The humblest cottage may have walls, stairs, floors, and roof of the same hollow material; they may be made dry, warm, and fireproof; ventilation may be simple and effective, and fuel may be economised to an extent not at present practised, by expending much of the heat of the fire in the hollow walls and floors. With these advantages, Mr. Chadwick proposes to combine extreme solidity of substance and colour: solidity and finish he will obtain by mechanical pressure; colour by thin layers of tinted clay pressed on the surface, or by washing the semi-dried brick or tile in a mineral solution. The tile making machines will press out any form of section, plain or moulded; and any raised form, not undercut, may be obtained by pressure, as practised in terra-cotta. Hollow bricks can be made subservient to improved construction; they may be worked and combined with stone, solid brick, iron, and timber; they may be made to serve in numerous instances all the purposes of solid material, with advantages peculiarly their own. Much more may be said on the subject—in fact is said by Mr. Chadwick in his volume, which I trust may ultimately be laid before the public.

Before leaving the subject, I beg distinctly to remark that I do not contemplate a superseding with hollow bricks all practised forms and modes of construction, but an adaptation where reason can clearly demonstrate an advantage. One material and one method is the project of a theorist of one idea, or of a quack.

Nature revels in infinite variety of structure, but is always perfect in adaptation and usefulness: let us break the shackles of precedent, and try to imitate nature in her economy, use, and beauty. To do this, construction must ever be our first consideration; this must be adapted to utility, and we may then add ornament for beauty, but ever with consistency.*

ROBERT RAWLINSON.

MONUMENT TO MR. PETER NICHOLSON, ARCHITECT, AT CARLISLE.—In respect to the statue, or other suitable and lasting memorial of this useful member of our profession, which it is proposed to erect in Carlisle, a correspondent, "Alpha," suggests that the fact ought not to be lost sight of that he died in very poor circumstances. It is to be hoped, therefore, that while his talent is honoured his family will not be neglected, otherwise a monument to his memory would be but a sorry mockery of the man.

* The great arch was keyed on March 3rd, 1849, the centres were lowered on the 5th, and it had deflected 3-8ths of an inch by the 12th, and was found in precisely the same position April 14th. The whole of the timbering forming the great centres will be taken down by the first week in May. The arch, however, stands perfectly clear of everything.

NOTES IN THE PROVINCES.

THE repairs of the rood tower of Lincoln Cathedral are proceeding. The south and west sides have been repaired, and the east side is in progress.——A hotel, built by Messrs. Grissell and Peto, near the Colchester Railway station, at a cost of 12,000*l.* to 15,000*l.*, has been charitably converted by Mr. Peto into an asylum for infant idiots.——The new Wesleyan Chapel in Hobson-street, Cambridge, is of white brick with stone dressings; the portico, Corinthian columns, and antæ, are of Ketton stone. The length of the building is 61 feet; width, 45 feet 4 inches; accommodation, 1,000 sittings,—400 free. Mr. Trimer was the architect, and the builders were Messrs. Quinsee and Attack, of Cambridge. The final cost was 2,100*l.* There are school-rooms under the chapel.——The new building near the Sussex County Hospital, Brighton, intended for the Brighton College, the first stone of which was laid on 27th June last, is rapidly approaching completion. Mr. G. G. Scott is the architect, and Messrs. Wisden and Anscombe are the builders. The style is collegiate of fourteenth century, with cloisters along the front of the building. The principal front of the design only has been hitherto undertaken. The class-rooms, however, will accommodate 300 pupils. The plan includes a school-room, dining-room, and chapel; the whole to form three sides of a quadrangle, with houses for the master and wardens arranged about the front.——The market improvements at Worcester, in the conversion of a space of ground, recently occupied as a market for green-grocery, into a butchers' and fish market, are rapidly progressing, under the superintendence of Messrs. Rowe and Son, architects, of that city. The butchers' market will be 112 feet in length by 40 feet wide, and fitted up with four rows of stalls, and lighted by side lights. The fish market will be divided from it, and lighted from the roof. The height of the market to the apex of the roof will be 31 feet, and the timber supporting the roof will be exposed to view. The *Journal* speaks favourably of the design.——The church at Heywood, Westbury, built at the expense of Mr. H. G. G. Ludlow, of Heywood, was consecrated on Thursday week. The building is in the early English style, with open benches for about 360 persons. The old parish church has lately been restored at the cost of 2,000*l.*——The new chapel at Copston, near Monk's Kirby, Warwickshire, was consecrated on Tuesday week. It is in the decorated style of architecture, and capable of holding two hundred persons. It has been built at the expense of the Earl of Denbigh. The cost was 1,000*l.* exclusive of carriage of materials by the Earl's tenants, free.——On Thursday week the inscription stone of the Birmingham Free Industrial Schools, in Gem-street, was laid with the usual ceremonies. The cost of the erection will be upwards of 2,000*l.*, and the accommodation sufficient for 200 children of both sexes.——The new Concert-hall, in Hope-street, Liverpool, noticed by us lately amongst buildings in progress there, is about to be formally opened with a series of grand musical performances.——Mr. Samuel Addison, banker, Wednesbury, has contributed 700*l.* for the completion of the tower and spire of the new church there. The same gentleman gave 500*l.* in addition to the site, towards the erection of the church itself.——At the Jarrow Docks the operations commenced by the contractors have been suspended, and the workmen discharged, owing to the unsettled state of the affairs of the Railway Company, and the probability of such schemes being, for the present, abandoned. It is said that the arrangements for purchasing the land in the locality were not completed.——The first stone of St. Peter's Church, Ascot Heath, was laid last Monday by the Bishop of Oxford. Mr. Ferrey, architect; Messrs. Higgs and Sons, builders. It is in the Decorated style, and is to cost about 1,400*l.*——The time for lodging plans in competition by certain architects, for the Essex County Lunatic Asylum at Brentwood, has been extended to 1st May.——A site for a new asylum at Hampshire has been selected at Titchfield.——The church of St. James, Lower Gornall, has been enlarged and refitted. The chancel, entirely new, is laid with encaustic tiles. Mr. Bourne, of Dudley, was the architect employed.——A large building in Great Ancoats-street, Manchester, according to the local *Spectator*, is to be fitted up, under the direction of a competent architect, as a model lodging-house.——A sum of 1,600*l.* has been voted, at the West Riding sessions, for the enlargement of the second court of the Wakefield Court-house.——The foundation stone of the Durham Mechanics' Institute was laid, on the 30th ult., by the leader of a procession of Freemasons.——The chancel window of Crosscannonby Church, near Maryport, has been filled with stained glass, supplied by the parishioners. The window consists of three lancet lights; in the centre one of which is represented the Crucifixion. In the left lancet is St. Peter, and in the right, the saint to whom the structure is dedicated. The remainder of the window is filled with flowered quatre-foils, enclosed in circles. The designs were furnished and the work executed by the Messrs. Scott, of Carlisle.

A NOTE TO WORKMEN.

OBSERVING in your publication of last week some remarks on the want of ambition among working men, I beg to make a few observations on the subject. The statements in the article are certainly lamentable facts, the extent of which is very considerable. The evils resulting from them greatly impoverish the nation, and entail misery and wretchedness on posterity. The following remarks relate alone to myself. They are not given as a boast, neither as reproof, but rather to excite an honest ambition in the minds of the working classes. I am a married man, with a wife and five children, who are dependent on my exertions for their support. Being a working mechanic, my income is (when employed) 1*l.* 10*s.* per week. My parents, thirty years ago, were similarly situated, with about one-third of this income. From them I learned a lesson of economy. The great question with me is, what quantity and quality of the necessaries of life are most conducive to promote health, strength, and happiness. Guided by the wise in former ages, and by my own experience, I have long since come to this conclusion—that man's real wants are comparatively few. I have found, therefore, in past years, that two-thirds of my income will sufficiently supply myself and family with the necessaries of life; the one-sixth of the same will meet the casualties of loss of employment; the other sixth, which is 5*s.* per week, or about 10*l.* per year, is laid by for sickness or age. This trifling sum, with interest and compound interest, in a few years will make a poor man comparatively rich. Now, I am persuaded that there are thousands of working men, if they would make an honest statement of what they spend foolishly, the amount of money so spent would be more than I pretend to save, and they are often laying themselves under the necessity of giving 20 per cent. for pledges of their property, when at the same time they might, by resolution and good management, be receiving instead of giving interest for money. Let these hints be received in the spirit they are given. Let them excite an honest ambition to raise ourselves from that state of degradation in which too many of us are found. Better times approach but slowly to the sluggard and profligate.—I might rather say, they are always retreating from him, while the industrious and frugal are overtaking them every day.

A WORKING MAN,
Formerly an "Old Mason."

BURSTING OF A RESERVOIR NEAR KEIGHLEY.—At Cowling, on the top of a moor, a reservoir, which supplied a small cotton mill with water, lately gave way, and carried all before it with a stream occasionally 15 to 20 feet deep; but fortunately without the loss of a single life, though several were in imminent jeopardy. A bridge was carried away, and rocks of several tons weight were bowled along with a noise like prolonged thunder. It is even alleged, that "in one place the living solid rock has been scooped away to such an extent that a basin big enough to contain a large house has been formed in one hour."

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